CLAIMS

What is claimed is:

- 1 1. A radio frequency amplifier that provides an
- 2 electrical power to an electrode placed in contact with a
- 3 cornea having a tissue impedance, comprising:
- a radio frequency electrical circuit calibrated to
- 5 provide an actual power curve to the cornea within +/- 10%
- 6 of a desired power curve over an operating range of the
- 7 tissue impedance.
- 1 2. The radio frequency amplifier of claim 1, wherein
- 2 said radio frequency electrical circuit includes an
- 3 transformer, a capacitor, and a pre-load resistor in
- 4 parallel with a patient load resistance.
- 1 3. The radio frequency amplifier of claim 1, wherein
- 2 the actual power curve varies between .6 to .15 watts.
- 1 4. The radio frequency amplifier of claim 3, wherein
- 2 radio frequency electrical circuit applies power to a load
- 3 with an impedance that varies between 330 to 2600 ohms.

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- 1 5. The radio frequency amplifier of claim 1, wherein
- 2 said radio frequency electrical circuit generates a series
- 3 of damped waveforms.
- 1 6. The radio frequency amplifier of claim 1, wherein
- 2 the operating range of the actual power curve has a time
- 3 duration less than 1 second.
- 1 7. A radio frequency amplifier that provides an
- 2 electrical power to an electrode placed in contact with a
- 3 cornea having a tissue impedance, comprising:
- 4 radio frequency circuit means for providing an actual
- 5 power curve to the cornea within +/- 10% of a desired power
- 6 curve over an operating range of the tissue impedance.
- 1 8. The radio frequency amplifier of claim 7, wherein
- 2 said radio frequency circuit means includes an transformer,
- 3 a capacitor, and a pre-load resistor in parallel with
- 4 patient load resistance.
- 1 9. The radio frequency amplifier of claim 7, wherein
- 2 the actual power curve varies between .6 to .15 watts.

- 1 10. The radio frequency amplifier of claim 9, wherein
- 2 radio frequency circuit means applies power to a load with
- 3 an impedance that varies between 330 to 2600 ohms.
- 1 11. The radio frequency amplifier of claim 7, wherein
- 2 said radio frequency circuit means generates a series of
- 3 damped waveforms.
- 1 12. The power supply of claim 7, wherein the operating
- 2 range of the actual power curve has a time duration less
- 3 than 1 second.
- 1 13. A medical system that can denature a cornea having
- 2 a tissue impedance, comprising:
- a radio frequency electrical circuit calibrated to
- 4 provide an actual power curve to the cornea within +/- 10%
- 5 of a desired power curve over an operating range of the
- 6 tissue impedance;
- 7 an electrode coupled to said radio frequency electrical
- 8 circuit and which is placed into contact with the cornea;
- 9 and,

- 10 a ground element coupled to said radio frequency
- 11 electrical circuit.
 - 1 14. The system of claim 13, wherein said radio
 - 2 frequency electrical circuit includes a transformer, a
 - 3 capacitor, and a pre-load resistor in parallel with patient
 - 4 load resistance.
 - 1 15. The system of claim 13, wherein the actual power
 - 2 curve varies between .6 to .15 watts.
 - 1 16. The system of claim 15, wherein said radio
 - 2 frequency electrical circuit applies power to a load with
 - 3 an impedance that varies between 330 to 2600 ohms.
 - 1 17. The system of claim 13, wherein said radio
 - 2 frequency electrical circuit generates a series of damped
 - 3 waveforms.
 - 1 18. The system of claim 13, wherein the operating
 - 2 range of the actual power curve has a time duration less
 - 3 than 1 second.

- 1 19. A medical system that can denature a cornea having
- 2 a tissue impedance, comprising:
- an electrode that is placed into contact with the
- 4 cornea;
- 5 radio frequency circuit means for providing an actual
- 6 power curve to said electrode and the cornea within +/- 10%
- 7 of a desired power curve over an operating range of the
- 8 tissue impedance; and,
- a ground element coupled to said radio frequency
- 10 circuit means.
 - 1 20. The system of claim 19, wherein said radio
 - 2 frequency circuit means includes a transformer, a
 - 3 capacitor, and a pre-load resistor in parallel with patient
 - 4 load resistance.
 - 1 21. The system of claim 19, wherein the actual power
 - 2 curve varies between .6 to .15 watts.
 - 1 22. The system of claim 21, wherein radio frequency
 - 2 circuit means applies power to a load with an impedance
 - 3 that varies between 330 to 2600 ohms.

- 1 23. The system of claim 19, wherein said radio
- 2 frequency circuit means generates a series of damped
- 3 waveforms.
- 1 24. The power supply of claim 19, wherein the
- 2 operating range of the actual power curve has a time
- 3 duration less than 1 second.
- 1 25. A method for correcting a vision of a cornea
- 2 having a tissue impedance, comprising:
- applying power to the cornea with a power curve that is
- 4 within +/- 10% of a desired power curve over an operating
- 5 range of the tissue impedance.
- 1 26. The method of claim 25, wherein the power is
- 2 applied in a circular pattern about the cornea.
- 1 27. The method of claim 26, wherein the circular
- 2 pattern has a diameter between 6 to 8 millimeters.
- 1 28. The method of claim 25, wherein a tip of the
- 2 electrode is inserted into the cornea.

- 1 29. The method of claim 25, wherein the applied power
- 2 varies between .6 to .15 watts.
- 1 30. The method of claim 25, wherein the power is
- 2 applied to a load with an impedance that varies between 330
- 3 to 2600 ohms.